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APPLICANT: Idnani EXAMINER: El Hady, Nabil M

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ENTITLED: METHOD AND APPARATUS FOR MAINTAINING SIP CONTACT ADDRESSES

Motorola, Inc. Corporate Offices 1303 E. Algonquin Road Schaumburg, IL 60196 May 30, 2006

AMENDMENT AND RESPONSE

Honorable Commissioner of Patents and Trademarks Alexandria, VA 22313-1450

Sir:

In view of the issues raised in the office action mailed January 27, 2006, the following amendment and response is hereby respectfully submitted by the applicants. Entry of the amendments submitted herein, reconsideration of any outstanding objections and/or rejections, and allowance of the present application are respectfully requested.

CLAIM LISTING

 (currently amended) A method for maintaining SIP contact addresses, the method comprising:

sending, by a SIP proxy user agent (UA), a first registration message for a remote unit to a SIP registrar;

sending a second registration message for the remote unit to the SIP registrar; receiving, in response to the second registration message, a response that indicates a contact address more recent than any provided by the SIP proxy UA; and

sending, in response to the received response, a deregistration message for the remote unit to the SIP registrar.

- (original) The method of claim 1 further comprising receiving, by the SIP proxy UA, a non-SIP registration request from the remote unit prior to sending the first registration message.
- 3. (original) The method of claim 1 wherein the second registration message is sent in response to a registration timer expiration.
- (original) The method of claim 1 wherein the first registration message comprises a SIP REGISTER message.
- 5. (original) The method of claim 4 wherein the SIP REGISTER message indicates that it comprises a new contact address.
- (original) The method of claim 1 wherein the second registration message comprises a SIP REGISTER message.

- (original) The method of claim 1 wherein the response that indicates a contact address more recent than any provided by the SIP proxy UA comprises a SIP 200 OK message and at least one creation time stamp.
- 8. (original) The method of claim 7 wherein the response further comprises a group of contact addresses and a creation time stamp for each.
- 9. (original) The method of claim 1 wherein the deregistration message comprises a SIP REGISTER message with an Expires header value of "0".

10. (currently amended) A method for maintaining SIP contact addresses, the method comprising:

receiving a first registration message for a remote unit from a first SIP proxy user agent (UA):

storing, as a member of a group of contact addresses for the remote unit, both a first contact address based on the first registration message and a first creation timestamp for the first contact address;

receiving a second registration message for the remote unit from a second SIP proxy UA after receiving the first registration message;

storing, as a member of the group of contact addresses for the remote unit, both a second contact address for the remote unit and a second creation timestamp for the second contact address;

receiving a third registration message for the remote unit from the first SIP proxy UA:

sending, in response to the third registration message, a response that indicates a contact address more recent than any provided by the first SIP proxy UA;

receiving a deregistration message for the remote unit from the first SIP proxy UA; and

removing, from the group of contact addresses for the remote unit, the first contact address.

- 11. (original) The method of claim 10 wherein the response that indicates a contact address more recent than any provided by the first SIP proxy UA comprises a SIP 200 OK message and at least one creation time stamp.
- 12. (original) The method of claim 11 wherein the response further comprises a group of contact addresses and a creation time stamp for each.

- 13. (original) The method of claim 10 wherein the first registration message comprises a SIP REGISTER message, the second registration message comprises a SIP REGISTER message, and the third registration message comprises a SIP REGISTER message.
- 14. (original) The method of claim 10 wherein the deregistration message comprises a SIP REGISTER message with an Expires header value of "0".

- 15. (original) A radio access network (RAN) component comprising: a wireless network interface: and
- a SIP proxy user agent, communicatively coupled to the wireless network interface, adapted to

receive a registration request from a remote unit via the wireless network interface.

send a first registration message for the remote unit to a SIP registrar, send a second registration message for the remote unit to the SIP registrar,

receive, in response to the second registration message, a response that indicates a contact address more recent than any provided by the SIP proxy UA, and

send, in response to the received response, a deregistration message for the remote unit to the SIP registrar.

- 16. (original) A SIP registrar comprising:
- a SIP location data base: and
- a SIP location processor, communicatively coupled to the SIP registration data base, adapted to

receive a first registration message for a remote unit from a first SIP proxy user agent (UA),

store in the SIP location data base, as a member of a group of contact addresses for the remote unit, both a first contact address based on the first registration message and a first creation timestamp for the first contact address.

receiving a second registration message for the remote unit from a second SIP proxy UA after receiving the first registration message,

storing in the SIP location data base, as a member of the group of contact addresses for the remote unit, both a second contact address for the remote unit and a second creation timestamp for the second contact address.

receiving a third registration message for the remote unit from the first SIP proxy UA,

sending, in response to the third registration message, a response that indicates a contact address more recent than any provided by the first SIP proxy UA,

receiving a deregistration message for the remote unit from the first SIP proxy UA, and

removing, from the group of contact addresses for the remote unit, the first contact address

REMARKS

Claim 16 is allowed; however, claims 1-15 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Respectfully disagreeing with these rejections, reconsideration is requested by the applicant. Nonetheless, the applicant has amended independent claims 1 and 10 to more clearly recite the present invention but not to narrow its scope.

Regarding the Examiner's comments in section 3(a) of the first office action, the applicant submits that no amendment is needed. The Examiner says that it is unclear if the second registration message is sent by the same SIP proxy that sends the first. In some embodiments of the present invention the same SIP proxy sends both registration messages; however, the same SIP proxy need not send both registration messages. Claims 1 and 15 purposefully do not recite language to address all of the possible embodiments of the present invention. Rather, claims 1 and 15 are written to succinctly recite a set of elements believed to be patentable over the prior art, without reciting various implementation options. The applicant submits that this is well-known claiming practice and that the omission of implementation details does not render a claim indefinite. The use of open-ended "comprising" language implies that what is not recited may or may not be added to embodiments within the scope of the present invention.

Regarding the Examiner's comments in section 3(b) of the first office action, the applicant submits that no amendment is needed. The Examiner questions why a response is not received for the first registration message. In some embodiments of the present invention such a response may be received while in others (or in certain situations) such a response may not be received. Claims 1 and 15 purposefully do not recite language to address all of the possible embodiments of the present invention. Rather, claims 1 and 15 are written to succinctly recite a set of elements believed to be patentable over the prior art, without reciting various implementation options. The applicant submits that this is well-known claiming practice and that the omission of

implementation details does not render a claim indefinite. The use of open-ended "comprising" language implies that what is not recited may or may not be added to embodiments within the scope of the present invention.

Regarding the Examiner's comments in sections 3(c) and 3(e) of the first office action, the applicant submits that no amendment is needed. The Examiner says that it is unclear how any contact address is provided by the SIP proxy. Depending on the embodiment of the present invention a contact address may be contained in both registration messages, in either registration message, or in other messaging. Regarding the Examiner's question about how it is determined that a contact address is more recent, the applicant submits that there are various, embodiment-specific, techniques that may be employed; for example, one class of techniques would involve timestamping. Claims 1, 10 and 15 purposefully do not recite language to address all of the possible embodiments of the present invention. Rather, claims 1, 10 and 15 are written to succinctly recite a set of elements believed to be patentable over the prior art, without reciting various implementation options. The applicant submits that this is well-known claiming practice and that the omission of implementation details does not render a claim indefinite. The use of open-ended "comprising" language implies that what is not recited may or may not be added to embodiments within the scope of the present invention. Regarding the Examiner's question about whether the same SIP proxy UA provides the contact addresses, claims 1 and 15 recite (emphasis added) receiving, "in response to the second registration message, a response that indicates a contact address more recent than any provided by the SIP proxy UA." The applicant submits that from the present claim language it is clear that the SIP proxy UA has not provided the more recent contact address

Regarding the Examiner's comments in section 3(d) of the first office action, the applicant submits that no amendment is needed. The Examiner says that it is unclear who is sending the deregistration message. In some embodiments of the present invention the same SIP proxy that sends either or both registration messages also sends the deregistration message; however, the same SIP proxy need not send the deregistration message. Claims 1 and 15 purposefully do not recite language to address all of the possible embodiments of the present invention. Rather, claims 1 and 15 are

written to succinctly recite a set of elements believed to be patentable over the prior art, without reciting various implementation options. The applicant submits that this is well-known claiming practice and that the omission of implementation details does not render a claim indefinite. The use of open-ended "comprising" language implies that what is not recited may or may not be added to embodiments within the scope of the present invention.

No remaining grounds for rejection or objection being given, the claims in their present form are asserted to be patentable over the prior art of record and in condition for allowance. Therefore, allowance and issuance of this case is earnestly solicited.

The Examiner is invited to contact the undersigned, if such communication would advance the prosecution of the present application. Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. 502117 -- Motorola. Inc.

Respectfully submitted, A. Idnani

Bv: /Jeffrev K. Jacobs/

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